Appl. No. 10/520,308 Amdt. Dated July 31, 2006 Reply to Office Action of May 12, 2006

Listing of Claims:

- 1. (Original) An apparatus which comprises two components which are displaceable relative to one another, a position visualization unit which is provided on one component of the apparatus, or on a part which is connected thereto, an image acquisition unit which is provided on the other component of the apparatus, or to a part which is connected thereto, in order to acquire images of a segment of the position visualization unit which changes due to a relative motion between the components of the apparatus, and an evaluation unit for extracting position information from the images.
- 2. (Original) An apparatus as claimed in claim 1, comprising a reference mark which is visible in the images and is attached to the image acquisition unit.
- 3. (Original) An apparatus as claimed in claim 1, comprising a position visualization unit which is constructed in the form of a measuring tape.
- 4. (Original) An apparatus as claimed in claim 1, in which a relative motion occurs which extends along a substantially straight line, and which comprises a position visualization unit which is arranged parallel to said straight line.
- 5. (Original) An apparatus as claimed in claim 1, comprising a position visualization unit which is arranged along a circular line, one of the components of the apparatus being journaled so as to be rotatable.
- 6. (Original) An apparatus as claimed in claim 1, comprising a position visualization unit on a tape-like carrier.
- 7. (Original) An apparatus as claimed in claim 6, comprising a tape-like carrier which is connected on the one side to the one component of the apparatus and on the other side to

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a roller which is mounted on the other component of the apparatus, said carrier being wound onto or unwound from the roller as a result of the relative motion.

- 8. (Original) An apparatus as claimed in claim 1, comprising illumination means for illuminating the acquisition zone.
- 9. (Original) An apparatus as claimed in claim 1, comprising an image acquisition unit in the form of a CCD camera.
- 10. (Original) An X-ray apparatus which comprises two components which are displaceable relative to one another, a position visualization unit which is provided on one component of the apparatus, or on a part which is connected thereto, an image acquisition unit which is provided on the second component of the apparatus, or on a part which is connected thereto, in order to acquire images of a segment of the position visualization unit which changes due to the motion, and an evaluation unit for extracting position information from the images.
- 11. (Original) An X-ray apparatus as claimed in claim 10, characterized in that an X-ray source is arranged on the one component or the other component of the apparatus.